

Title (en)

HIGHLY DISPERSE MAGNETIC METAL OXIDE PARTICLES, PROCESSES FOR THEIR PREPARATION AND THEIR USE

Title (de)

HOCHDISPERGIERTE MAGNETISCHE METALLOXIDTEILCHEN,PRODUKTIONSVERFAHREN UND ANWENDUNG

Title (fr)

PARTICULES D'OXYDE METALLIQUE MAGNETIQUE HAUTEMENT DISPERSEES, PROCEDES POUR LES PREPARER ET LEUR UTILISATION

Publication

EP 0769195 A1 19970423 (EN)

Application

EP 95924916 A 19950622

Priority

- CH 217694 A 19940707
- EP 9502441 W 19950622

Abstract (en)

[origin: US5776360A] PCT No. PCT/EP95/02441 Sec. 371 Date Jan. 3, 1997 Sec. 102(e) Date Jan. 3, 1997 PCT Filed Jun. 22, 1995 PCT Pub. No. WO96/02060 PCT Pub. Date Jan. 25, 1996 This invention relates to magnetic particles comprising mixed oxides of divalent metals and iron (III), having a diameter of 1-10 nm and a surface area of 120-350 m²/g, with silanes bound to the surface of said particle. It also relates to (1) the process for making said particles by simultaneous precipitation and silanization from aqueous solution and (2) their use as carrier materials for the magnetic separation of substances immobilized therewith.

IPC 1-7

H01F 1/36; **H01F 1/44**; **G01N 33/543**; **B03C 1/01**

IPC 8 full level

H01F 1/34 (2006.01); **B03C 1/01** (2006.01); **C12Q 1/68** (2006.01); **C12Q 1/6806** (2018.01); **C12Q 1/6834** (2018.01); **G01N 33/543** (2006.01); **H01F 1/00** (2006.01); **H01F 1/36** (2006.01); **H01F 1/44** (2006.01)

CPC (source: EP KR US)

B03C 1/01 (2013.01 - EP US); **B82Y 25/00** (2013.01 - EP US); **C12Q 1/6806** (2013.01 - EP US); **C12Q 1/6834** (2013.01 - EP US); **G01N 33/5434** (2013.01 - EP US); **H01F 1/0054** (2013.01 - EP US); **H01F 1/147** (2013.01 - KR); **H01F 1/36** (2013.01 - EP US); **H01F 1/445** (2013.01 - EP US); **G01N 2446/20** (2013.01 - EP US); **G01N 2446/30** (2013.01 - EP US); **G01N 2446/86** (2013.01 - EP US); **G01N 2446/90** (2013.01 - EP US); **Y10T 428/2995** (2015.01 - EP US)

Citation (search report)

See references of WO 9602060A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IT LI

DOCDB simple family (publication)

US 5776360 A 19980707; AT E176077 T1 19990215; AU 2924095 A 19960209; AU 685300 B2 19980115; BR 9508246 A 19970930; CA 2194554 A1 19960125; DE 69507482 D1 19990304; DE 69507482 T2 19990819; EP 0769195 A1 19970423; EP 0769195 B1 19990120; JP H10502494 A 19980303; KR 970705154 A 19970906; PL 318099 A1 19970512; WO 9602060 A1 19960125

DOCDB simple family (application)

US 76509197 A 19970103; AT 95924916 T 19950622; AU 2924095 A 19950622; BR 9508246 A 19950622; CA 2194554 A 19950622; DE 69507482 T 19950622; EP 9502441 W 19950622; EP 95924916 A 19950622; JP 50407795 A 19950622; KR 19970700120 A 19970107; PL 31809995 A 19950622